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Applicant : Fazan et al.

Appl. No. : 09/037,945

Filed : March 10, 1998

For : STREAMLINED FIELD  
ISOLATION PROCESS

Examiner : George R. Fourson, III

2003 SEP 29 PM 3: 54

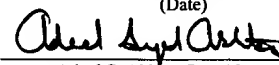
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Adeel S. Akhtar, Reg. No. 41,594

**REPLY BRIEF AND REQUEST FOR ORAL HEARING**

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Dear Sir:

In response to the Examiner's Answer in this appeal, mailed on March 24, 2003,  
 Appellants' reply as follows:

**I. Arguments Raised by Examiner's Answer and Appellants' Responses:**

**A. The inferred utility of an undisclosed modification of an embodiment is  
 motivation or suggestion to modify.**

**1. Examiner's Argument**

The Examiner continues to assert the following:

Appellant argues that the reference discloses disadvantages of omitting the wet oxidation stage and must instead disclose desirability. However it is sufficient that the reference suggest that omission of the wet oxidation step would result in a process having *utility* which in this case is formation of a field oxide useful as an isolation region.

Examiner's Answer p. 5 (*emphasis added*).

2. Appellants' Response

Appellants do not argue that, since the reference discloses disadvantages of omitting the wet oxide step, then *the reference* must disclose the desirability of omitting the step. Instead, Appellants argue that the Examiner must provide a suggestion or motivation *from the art* which evidences the desirability of omitting the wet oxide step. Rather than showing the desirability of omitting German's first step, the only motivation or suggestion provided by the Examiner is his conclusion that the remaining dry oxide step offers implicit *utility*. However, the possible utility of a modified embodiment not disclosed in the asserted art is *not*, by itself, adequate suggestion or motivation from the art to perform the modification in the first place. In other words, the Examiner's conclusion that it is possible that German could be so modified, *if* desired, does not support the rejection of Appellants claims. "Utility" cannot serve as a reason to stray from the teachings of the art in general and applied references in particular, which teach the use of an additional wet oxidation step.

**B. The inferred utility of an undisclosed modification of an embodiment is sufficient motivation or suggestion to overcome disclosed, explicit disadvantage of the modification.**

1. Examiner's Argument

The Examiner has also continued to assert the following:

Appellant argues that the reference must disclose elimination of the first oxidation step. However, this is not necessary. As discussed above, the reference suggests elimination of the step in disclosing the function of the step *in the event that the disclosed function is not desired* to be obtained and, as discussed above, in comparison to a process in which the step is eliminated. It is clear from the teachings of the reference that a useful field oxide would be produced by the second step alone *although the process would be longer in duration*.

Examiner's Answer p. 6 (*emphasis added*)

2. Appellants' Response

Appellants have argued above that, without more, the predicted utility of a modified embodiment is not a replacement for the required suggestion or motivation from the art to so modify. In addition, Appellants further submit that predicted, but undisclosed, utility is an especially inadequate motivation or suggestion to modify an embodiment when the reference

explicitly discloses that so modifying would be disadvantageous. It should be noted that the Examiner agrees that elimination of the first step would be disadvantageous as “the process would be longer in duration.” Examiner’s Answer p. 6. Other than repeatedly stressing that the first step could be eliminated if the skilled artisan wanted to make the fabrication process more time consuming, the Examiner has failed to provide any counterbalancing reasons from the art as to *why the skilled artisan would be motivated to modify German’s process to be less efficient* by eliminating the first step. By stating that the wet oxidation step could be eliminated “*in the event* that the disclosed function is not desired, the Examiner again fails to appreciate that showing *desirability* is part of a *prima facie* case of obviousness. See *In re Deminski*, 230 U.S.P.Q. 313, 315 (Fed. Cir. 1986)(“There is nothing in the prior art references, either singly or in combination, ‘*to suggest the desirability, and thus the obviousness,*’ of designing the valve assembly so that it can be removed as a unit.”)(*emphasis added*).

**C. Non-preferred embodiments in the prior art are relevant disclosure for the purposes of determining patentability of an invention even if the preferred embodiments teach away from these non-preferred embodiments.**

*1. Examiner’s Argument*

The Examiner argues that “a prior art opinion that a claimed invention is not preferred for a particular limited purpose, does not preclude utility of the invention for that or another purpose, or even preferability of the invention for another purpose.” Examiner’s Answer p. 6. In support of the foregoing argument, the Examiner cites a number of cases for the proposition that non-preferred embodiments are still relevant prior art and, also, that preferred embodiments do not teach away from non-preferred embodiments.

*2. Appellants’ Response*

Appellants do not challenge the Examiner’s statement that “a prior art opinion that a claimed invention is not preferred for a particular limited purpose, does not preclude utility of the invention for that or another purpose, or even preferability of the invention for another purpose.” However, Appellants assert that this statement is inapplicable to both Appellants’ arguments and the present facts. Specifically, Appellants do not dispute that non-preferred embodiments are relevant prior art.

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Instead, Appellants argue that *modifications of a preferred embodiment* in a reference, which are *not disclosed as an embodiment at all* in that reference (whether preferred or non-preferred), must be supported by some motivation or suggestion from the prior art other than mere implied utility alone. Furthermore, despite the case law cited by the Examiner as supporting the relevance of non-preferred embodiments to a patentability determination, are inapplicable as the Examiner is not basing his rejections on any identified *embodiment* from the art. In other words, the relevance of non-preferred embodiments is inapplicable, since the Examiner has not based his rejections on *any* disclosed embodiments, whether preferred or not. Instead of citing an actual embodiment from the art, the Examiner is modifying a prior art embodiment in an admittedly undesirable fashion without provided any justification from the art for doing so other than the fact that some (diminished) utility would remain. Reduced utility hardly serves as a suggestion to modify the teachings of the prior art.

## II. Conclusion

In view of the foregoing amendments, Appellants respectfully submit that the rejections of the pending claims over German '885 alone or in view of Marshall et al. are improper and should be withdrawn.

## III. Request for Oral Hearing

Pursuant to 37 C.F.R. § 1.194, Appellants respectfully request an Oral Hearing in this Appeal. This Request is also made in a separate paper filed herewith, and is accompanied by the fee set forth in 37 C.F.R. §1.17(d).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: May 23, 2003

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